DIGITTRADE

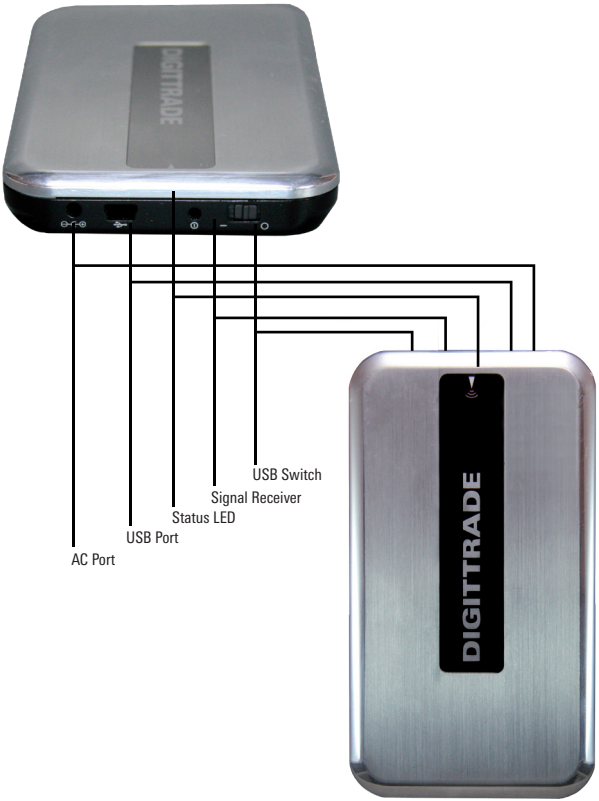
Security Festplatte RS128

User Manual

Contents

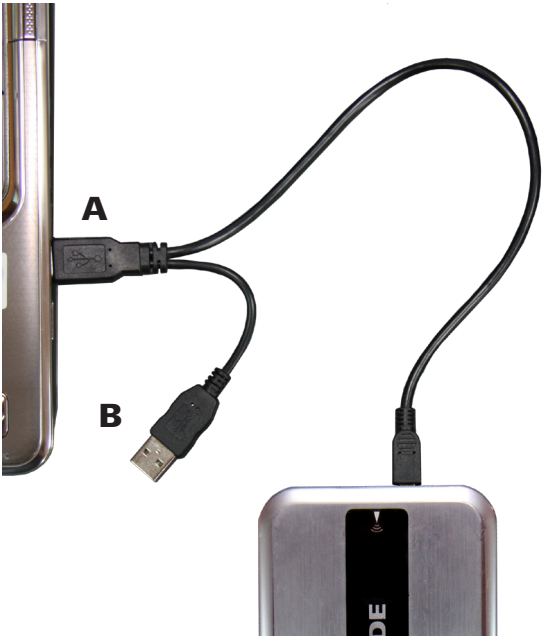
The Device	4
Connection to USB 2.0 Port	5
Connection to USB 1.1 Port	6
Switching-On	7
Locking and Unlocking the Hard Drive	7
Partitioning / Formatting using Windows	8
Partitioning / Formatting using MAC OS X	13
Partitioning / Formatting using Linux	16
The Correct File System	20
Technical Specifications	22
RFID Transponder	23
Triple Protection	24
Data Security and Disclaimer	25
FAQ - Frequently Asked Questions	26
WEEE Statement	28

The Device


DIGITTRADE
USB Switch
Signal Receiver
Status LED
USB Port
AC Port
DIGITTRADE

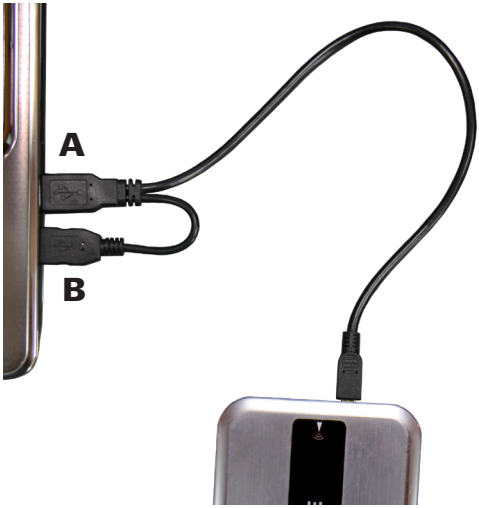
Connection to USB 2.0 Port

Connect the DIGITTRADE Security Hard Drive RS128 to your PC using the USB cable included in delivery. Please use therefore the A-plug or the integrated USB port as shown on the picture.



Connection to USB 1.1 Port

Connect the DIGITTRADE Security Hard Drive RS128 to your PC using the USB-cable included in delivery. Please note that the A- and B - plugs have to be connected as shown on the picture.



Note: *The hard drive will only be identified by the system, if it is turned on and unlocked. (see chapter "Locking and Unlocking of the hard drive", p.8)*

Internal or external USB

Move the USB switch to use either the integrated USB or the external USB.

Locking and Unlocking the Hard Drive

To avoid unauthorized access to your sensitive data the DIGITTRADE Security Hard Drive RS128 is always locked and needs to be unlocked for use.
Hold one of the two enclosed RFID keys above the reception symbol of the hard drive.

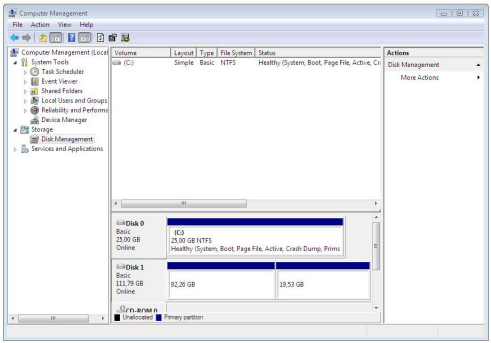
The hard drive will be unlocked, if you hear a short acoustic signal and the green LED flashs.
The hard drive will be identified by the system. If you unplug the hard drive from the system it will be unlocked again. Your data will immediately be protected against unauthorized access.

Note: *The hard drive also can be locked by holding the key again over the reception symbol or by turning it off.*

Partitioning / Formatting using Windows

Please follow the instructions to customise the file system, partition size and number of partitions.

- Go to “control panel” and double click on “Administrative Tools”.
- Open the “Computer Management” and choose “Disk Management”.



- Choose with your mouse the external hard drive and open the context menu using the right mouse button.

- choose the menu item “Formatting” to format the hard drive

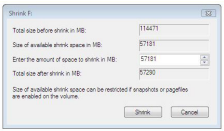
Note: *All data will be deleted irrevocably and cannot be restored after formatting.*

To partition the hard drive choose the item “Shrink Volume”.

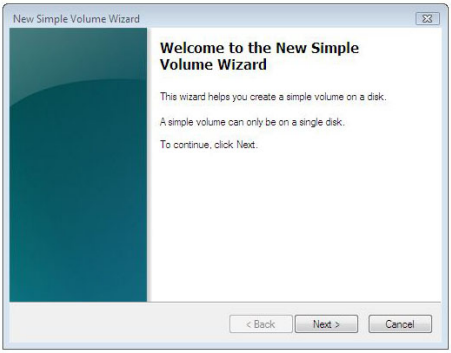
- Type in the desired memory capacity (in MB).

- An unassigned field will be shown in the administration display.

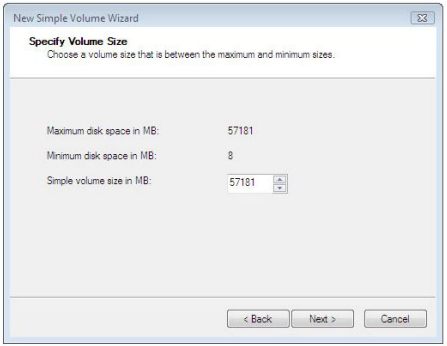
- Mark this unassigned field with the mouse and open the context menu with the right mouse button and choose the item “New Simple Volume”.


Shrink F:
Total size before shrink in MB:
114471
Size of available shrink space in MB:
57181
Enter the amount of space to shrink in MB:
57181
Total size after shrink in MB:
57290
Size of available shrink space can be restricted if snapshots or pagefiles are enabled on the volume.
Shrink
Cancel

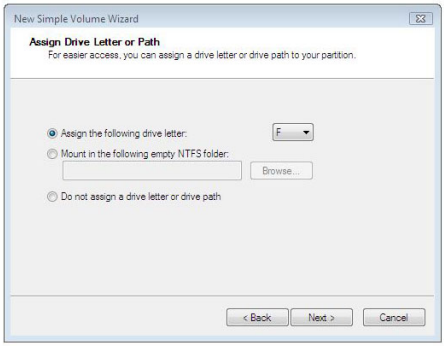
The partitioning assist will appear.


New Simple Volume Wizard
Welcome to the New Simple Volume Wizard
This wizard helps you create a simple volume on a disk.
A simple volume can only be on a single disk.
To continue, click Next.
< Back
Next >
Cancel

- Click on “Next”.

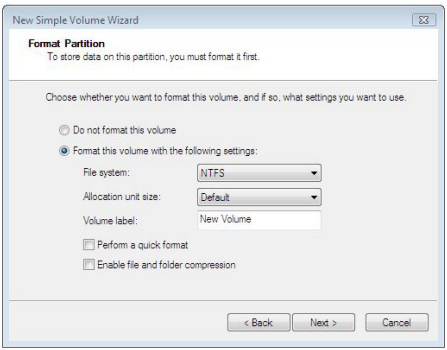


- Type in the desired size of the partition in MB and click on “Next”.

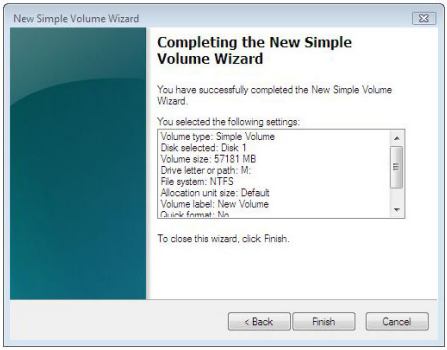

New Simple Volume Wizard
Assign Drive Letter or Path
For easier access, you can assign a drive letter or drive path to your partition.
Assign the following drive letter:
F
Mount in the following empty NTFS folder:
Browse...
Do not assign a drive letter or drive path
< Back
Next >
Cancel

- Choose a drive letter for the partition.

- Click on “Next”.


New Simple Volume Wizard
Format Partition
To store data on this partition, you must format it first.
Choose whether you want to format this volume, and if so, what settings you want to use.
Do not format this volume
Format this volume with the following settings:
File system:
NTFS
Allocation unit size:
Default
Volume label:
New Volume
Perform a quick format
Enable file and folder compression
< Back
Next >
Cancel

- Choose the desired file system, the type of formatting and click on “Next”.

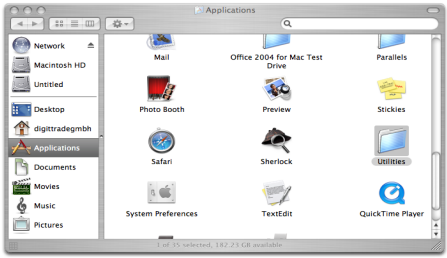

New Simple Volume Wizard
Completing the New Simple Volume Wizard
You have successfully completed the New Simple Volume Wizard.
You selected the following settings:
Volume type: Simple Volume
Disk selected: Disk 1
Volume size: 57181 MB
Drive letter or path: M:
File system: NTFS
Allocation unit size: Default
Volume label: New Volume
Quick format: No
To close this wizard, click Finish.
< Back
Finish
Cancel

- The partitioning will be finished now, confirm this action by clicking on “Finish”.

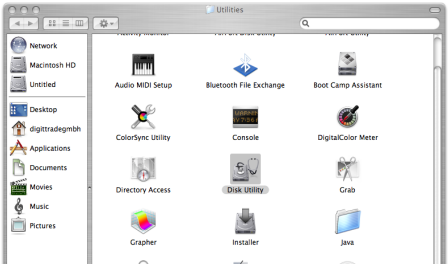
Note: *The newly partitioned field will be formatted now. After the formatting is completed the new partition will be automatically identified by the system.*

Partitioning / Formatting using MAC OS X

Please follow the instructions to customise the file system, partition size and number of partitions.

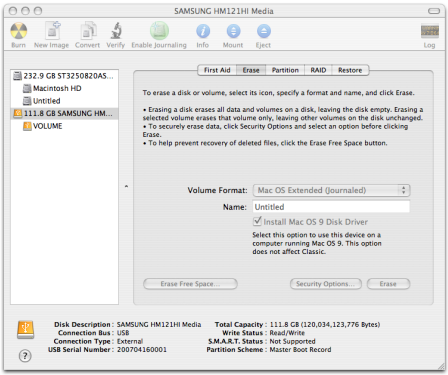


- Select “Utilities” from “Applications”.

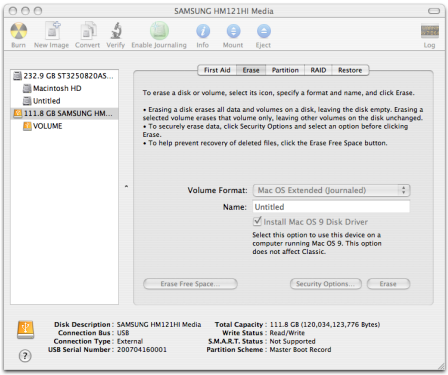


- Choose “Disk Utility”.

- Choose from the left drive overview the external hard drive.


SAMSUNG HM121HI Media
Burn
New Image
Convert
Verify
Enable Journaling
Info
Mount
Eject
Log
232.9 GB ST3250820AS...
Macintosh HD
Untitled
111.8 GB SAMSUNG HM...
VOLUME
First Aid
Erase
Partition
RAID
Restore
To erase a disk or volume, select its icon, specify a format and name, and click Erase.
• Erasing a disk erases all data and volumes on a disk, leaving the disk empty. Erasing a selected volume erases that volume only, leaving other volumes on the disk unchanged.
• To securely erase data, click Security Options and select an option before clicking Erase.
• To help prevent recovery of deleted files, click the Erase Free Space button.
Volume Format:
Mac OS Extended (Journaled)
Name:
Untitled
Install Mac OS 9 Disk Driver
Select this option to use this device on a computer running Mac OS 9. This option does not affect Classic.
Erase Free Space...
Security Options...
Erase
Disk Description : SAMSUNG HM121HI Media
Connection Bus : USB
Connection Type : External
USB Serial Number : 200704160001
Total Capacity : 111.8 GB (120,034,123,776 Bytes)
Write Status : Read/Write
S.M.A.R.T. Status : Not Supported
Partition Scheme : Master Boot Record

- Choose from the main index the option “Partition”.


SAMSUNG HM121HI Media
Burn
New Image
Convert
Verify
Enable Journaling
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Mount
Eject
Log
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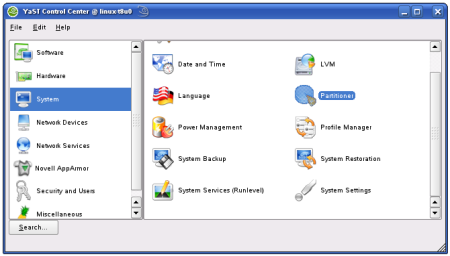
Erase
Partition
RAID
Restore
232.9 GB ST3250820AS...
Macintosh HD
Untitled
111.8 GB SAMSUNG HM...
VOLUME
To erase a disk or volume, select its icon, specify a format and name, and click Erase.
• Erasing a disk erases all data and volumes on a disk, leaving the disk empty. Erasing a selected volume erases that volume only, leaving other volumes on the disk unchanged.
• To securely erase data, click Security Options and select an option before clicking Erase.
• To help prevent recovery of deleted files, click the Erase Free Space button.
Volume Format:
Mac OS Extended (Journaled)
Name:
Untitled
Install Mac OS 9 Disk Driver
Select this option to use this device on a computer running Mac OS 9. This option does not affect Classic.
Erase Free Space...
Security Options...
Erase
Disk Description : SAMSUNG HM121HI Media
Connection Bus : USB
Connection Type : External
USB Serial Number : 20070416001
Total Capacity : 111.8 GB (120,034,123,776 Bytes)
Write Status : Read/Write
S.M.A.R.T. Status : Not Supported
Partition Scheme : Master Boot Record

- In this menu you can change partition sizes, delete partitions or create new partitions.

Partitioning / Formatting using Linux

It is possible to divide the hard drive in several partitions. The instruction below is described on the base of YaST and Suse Linux. This procedure is similar under other Linux distributions.

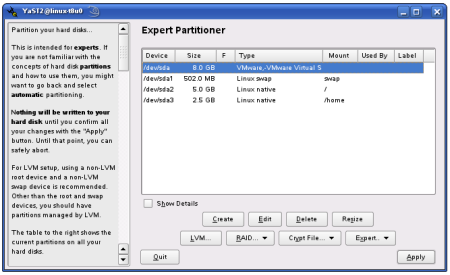
- First open YaST. If necessary, you will need to authenticate yourself.



- Choose from the left side “System” and from the right field “Partitioner”.

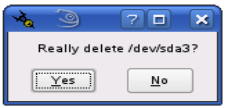
- For security reasons a window will open and you will be asked whether you are familiar with the partitioning. Confirm this with “Yes”.

- The volume table of your system will appear.



- Now you can choose the desired volume, partition it or edit or delete already existing partitions.

- To delete the standard NTFS partition please click on it and afterwards on “Delete”.



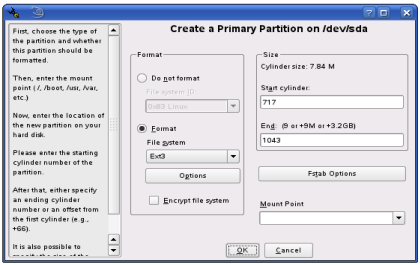
- You will be asked whether you really want to delete the partition. Make sure you have chosen the correct partition and confirm with a click on “Yes”.

Note: *If you delete the partition, you will delete irrevocably all files stored on it.*

- To create a new partition in the free space of your volume click on “Create”.

- Choose a volume to create the new partition.

- You will be asked which type of partition you want to create. It is recommended to use “Primary Partition”.

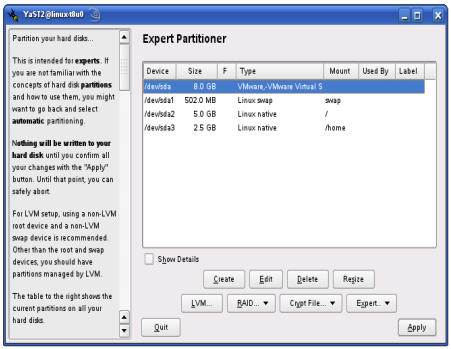

Create a Primary Partition on /dev/sda
First, choose the type of the partition and whether this partition should be formatted.
Then, enter the mount point (/, /boot, /usr, /var, etc.)
Now, enter the location of the new partition on your hard disk.
Please enter the starting cylinder number of the partition.
After that, either specify an ending cylinder number or an offset from the first cylinder (e.g., +8G).
It is also possible to
Format
Do not format
File System ID:
Format
File system
Ext3
Options
Encrypt file system
Size
Cylinder size: 7.84 M
Start cylinder:
717
End: (0 or +9M or +3.2GB)
1043
Fstab Options
Mount Point
OK
Cancel

- In this window you decide features of the partition. You can choose between different file systems and sizes and if necessary you can configure a mountingpoint for Linux. Confirm your configuration with “OK”.

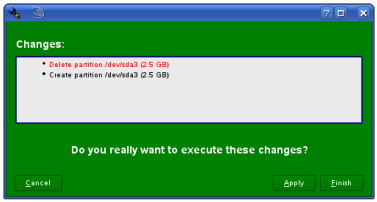
Note: *It is possible to encrypt your hard disk here additionally, but this may reduce the performance.*

- Formatting works similarly. Choose the desired partition and click on “Edit”.

- Click on “Formatting” and choose the adequate file system. Confirm your configurations with “OK”.



- Click on “Apply” that your modifications operate.



- All modifications will be shown in a new window. Make sure all the modifications are correct and confirm the configurations by clicking on “Apply”.

Note: *If you are not sure which file system or partition size to choose, we recommend taking the automatically entered values.*

The Correct File System

- In the table below you can see the compatibility between operating systems and file systems.

	NTFS	FAT32	HFS+	EXT4
Win 98	X	R, W	X	X
Win NT, 2000, ME, XP, Vista, 7	R, W	R, W	X	X
Mac OS X	R	R, W	R, W	X
Linux	R	R, W	X	R, W

R - reading W - writing X - no compatibility

With additional programs it could be possible to read or write on file systems, on which it usually is not possible.

The DIGITTRADE Security Hard Drive RS128 is at the time of delivery already preformatted in the NTFS file system. In the table above you can see the compatibility of NTFS to your operating system. Should NTFS not be suitable to your operating system, you will have to format the hard drive again (see chapter: "Partitioning / Formatting", p.42).

For windows users we recommend using NTFS. For Mac OS X is HFS+ the most powerful file system and for Linux you should use EXT4. Naturally, it is also possible to format the

DIGITTRADE Security Hard Drive RS128 with every other file system. This does not affect the security features.
If you want to use the hard drive using different operating systems, we recommend to use the FAT32 file system, since it can be read and written by almost every operating system. However, it will cause reductions in the maximum file size and partition size. Furthermore there will be performance differences.

Technical Specifications

Interface:	S-ATA II 300
Capacity:	80 GB - 1TB
Spindle Speed:	5400 - 7200 RPM
Data Transfer Rate:	USB 2.0 max 480 MBits/s USB 1.1 max 12 MBits/s
Access Time:	12 ms
Buffer Memory:	8192 - 16384 KB
Acoustic Idle:	<24 dBA

Computers and hard drive manufacturers convert differently from Byte to KByte, MByte and GByte. Hard drive manufacturers calculate in the metric

system (1 kByte = 10^3 Byte = 1000 Byte) and computers use due to their construction the dual system (1 kByte = 2^{10} Byte = 1024 Byte). The outcomes of this are the following differences in the representation of the memory capacity.

HDD Manufacturer	True Capacity
80 GB	74,51 GB
160 GB	149,01 GB
250 GB	232,83 GB
320 GB	298,02 GB
500 GB	465,66 GB
750 GB	698,49 GB
1000 GB	931,32 GB

Only hard drives of leading manufacturers of proprietary goods are assembled.

RFID Transponder

RFID (Radio Frequency Identification) is the identification via electromagnetically waves. The RFID system contains of a transponder, which is included in an object and a reader for the readout of the transponder identification.

Protection system

RFID Access Control
The Access to the DIGITTRADE Security Hard Drive RS128 is protected using a 128 bit encryption according to AES by RFID.

Data Encryption
Data stored on the DIGITTRADE Security Hard Drive RS128 will be encrypted or decrypted automatically by an integrated hardware encryption module. This module is using 128 bit AES algorithm to encrypt or decrypt the data.
This encryption technology offers the highest standard for mobile data security and is certified by the National Institute of Standards and Technology of the United States of America (NIST).

The Advanced Encryption Standard (AES) specifies a FIPS-approved cryptographic algorithm (FIPS 197) that can be used to protect electronic data.

Data Security and Disclaimer

We recommend storing continuously the data saved on the DIGITTRADE Security Hard Drive RS128 on other storage media. This will protect you against a total data loss. The DIGITTRADE GmbH is not liable for data loss and thereby emerging costs and damages.

Storage of the Keys

There are two RFID keys included in delivery of the DIGITTRADE Security Hard Drive RS128. The unlocking of the hard drive is only possible with one of these two keys. If a defect or a loss occurs, please contact us immediately. A replacement key will be provided for you with costs. Please keep one of the keys in a safe spot, since it will be needed for the production of the replacement key.

If you lose both of the keys or they are defective, a reproduction of the key will be associated with an explicit higher complexity.

Furthermore it is necessary to send us your fully completed Owner's Certificate. Only with this an abuse of the key reproduction can be excluded.

Please advise us immediately if a loss or theft of your hard drive occurs. Thereby a reproduction of the key can be avoided.

FAQ - Frequently Asked Questions

The system does not identify the hard drive.

Please check whether the hard drive was unlocked by the key enclosed and whether USB switch is in the correct USB state. Please check also whether the USB cable is connected correctly (see chapter: “Connection to USB 2.0/1.1 port”, p.34).

I cannot write any files on the hard drive.

Please check whether the hard drive was formatted with the correct file system for your operating system. The NTFS file system can only be used by Windows users (see chapter: “The Correct File System”, p.49).

I lost one or both keys.

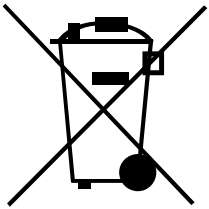
Please contact immediately our support:
Telephone: +49/ 345/ 2317353
E-mail: beratung@digittrade.de

For detailed information visit our support center on www.digittrade.de.

We will gladly answer your questions on the telephone: (0049) 345/ 2317353 or by e-mail: beratung@digittrade.de.

WEEE Statement

According to the EC directive, waste electrical and electronic equipment (WEEE) must not be disposed as municipal wastes.
To avoid the spread of the contained fabric components in your environment and to save natural resources we would like to ask you to hand this product after its economic life time only to a collecting point for WEEE in your area.
Thanks to these measures, materials of your product can be reused environmentally friendly.



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Deutsch
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English
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